

REMARKS

The above-identified amendments are to be entered prior to examination of this application. The claims have been made to conform most of the pending claims to the elected invention as described further below. No new matter is introduced by this amendment and entry of this amendment is respectfully requested.

In the Office Action, the Examiner sets forth a four-way restriction requirement as follows:

- I. Claims 1-4, 6-10, drawn to method and apparatus for chromatography, classified in class 210, subclass 656.
- II. Claims 5, 16-49, drawn to a separation device, classified in class 210, subclass 634.
- III. Claims 11-12, 15, drawn to electrophoresis method and apparatus, classified in class 204, subclass 450.
- IV. Claims 13-14, drawn to membrane separation, classified in class 210, subclass 652.

To be responsive to the Restriction Requirement, the Applicants elect with traverse the subject matter drawn to a method and apparatus for chromatography. The Examiner indicated that this subject matter encompasses claims 1-4 and 6-10. Furthermore, in view of the amendments set forth above, claims 16-49 are now drawn to the same subject matter and would be encompassed by Group I as well. Accordingly, the elected invention encompasses claims 1-4, 6-10, and 16-49.

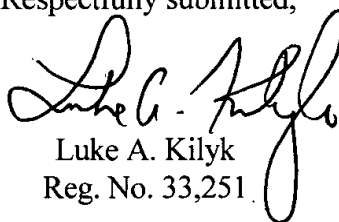
The Applicants believe that based on the classifications provided by the Examiner, there would appear to be no serious burden to examine all of the groups identified by the Examiner together. At the very least, the subject matter of Group I and Group II should be examined together since they are significantly related to each other.

The Applicants look forward to an Office Action on the merits.

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If there are any other fees due in connection with the filing of this response, please charge the fees to deposit Account No. 03-0060. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

16. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group is a phenyl or naphthyl group having ionic or ionizable groups.

17. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises an amino acid or derivatized amino acid, cyclodextrin, immobilized protein, polypeptides, or combinations thereof.

18. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises a -C₆F₅ group, a trifluoromethyl-phenyl group, a bis-trifluorophenyl group, or combinations thereof.

19. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises -Ar-(C_nH_{2n+1})_x group, wherein n is an integer of from about 1 to about 30 and x is an integer of from about 1 to about 3.

20. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises cyclodextrin attached through an alkyl group.

21. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises polyethylene glycol or methoxy-terminated polyethylene glycol or derivatized resins thereof.

22. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises -Ar-((C_nH_{2n})COOX)_m, wherein Ar is an aromatic group, n is 0 to 20, m is 1 to 3, and X is H, a cation, or an organic group.

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23. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises $\text{Ar}-((\text{C}_n\text{H}_{2n})\text{OH})_m$, wherein Ar is an aromatic group, n is 0 to 20, m is 1 to 3.

24. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{NH}_2)_m$, wherein n is 0 to 20, m is 1 to 3, or its protonated form: $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{NH}_3\text{X})_m$, wherein X is an ion, and Ar is an aromatic group.

25. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{CHNH}_3^+\text{COO}^-)_m$ and the reaction products thereof with molecules containing functional groups terminated in $-\text{NH}_2$, $-\text{OH}$, or $-\text{COOH}$, wherein Ar is an aromatic group and n is 0 to 20.

26. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{CH}=\text{CH}_2)_m$, wherein n is 0 to 20, m is 1 to 3 or $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{SO}_2\text{CH}=\text{CH}_2)_m$, where n is 0 to 20 and m is 1 to 3.

27. (Amended) The [separation device] chromatography column of claim [5] 1, wherein the organic group comprises at least one chiral ligand group.

28. (Amended) The [separation device] chromatography column of claim 16, further comprising a second organic group attached on the carbonaceous material.

29. (Amended) The [separation device] chromatography column of claim 17, further comprising a second organic group attached on the carbonaceous material.

30. (Amended) The [separation device] chromatography column of claim 18, further comprising a second organic group attached on the carbonaceous material.

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31. (Amended) The [separation device] chromatography column of claim 19, further comprising a second organic group attached on the carbonaceous material.

32. (Amended) The [separation device] chromatography column of claim 20, further comprising a second organic group attached on the carbonaceous material.

33. (Amended) The [separation device] chromatography column of claim 21, further comprising a second organic group attached on the carbonaceous material.

34. (Amended) The [separation device] chromatography column of claim 22, further comprising a second organic group attached on the carbonaceous material.

35. (Amended) The [separation device] chromatography column of claim 23, further comprising a second organic group attached on the carbonaceous material.

36. (Amended) The [separation device] chromatography column of claim 24, further comprising a second organic group attached on the carbonaceous material.

37. (Amended) The [separation device] chromatography column of claim 25, further comprising a second organic group attached on the carbonaceous material.

38. (Amended) The [separation device] chromatography column of claim 26, further comprising a second organic group attached on the carbonaceous material.

39. (Amended) The [separation device] chromatography column of claim 28, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

40. (Amended) The [separation device] chromatography column of claim 29, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

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41. (Amended) The [separation device] chromatography column of claim 30, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

42. (Amended) The [separation device] chromatography column of claim 31, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

43. (Amended) The [separation device] chromatography column of claim 32, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

44. (Amended) The [separation device] chromatography column of claim 33, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

45. (Amended) The [separation device] chromatography column of claim 34, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

46. (Amended) The [separation device] chromatography column of claim 35, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

47. (Amended) The [separation device] chromatography column of claim 36, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

48. (Amended) The [separation device] chromatography column of claim 37, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

49. (Amended) The [separation device] chromatography column of claim 38, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.